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ELISA

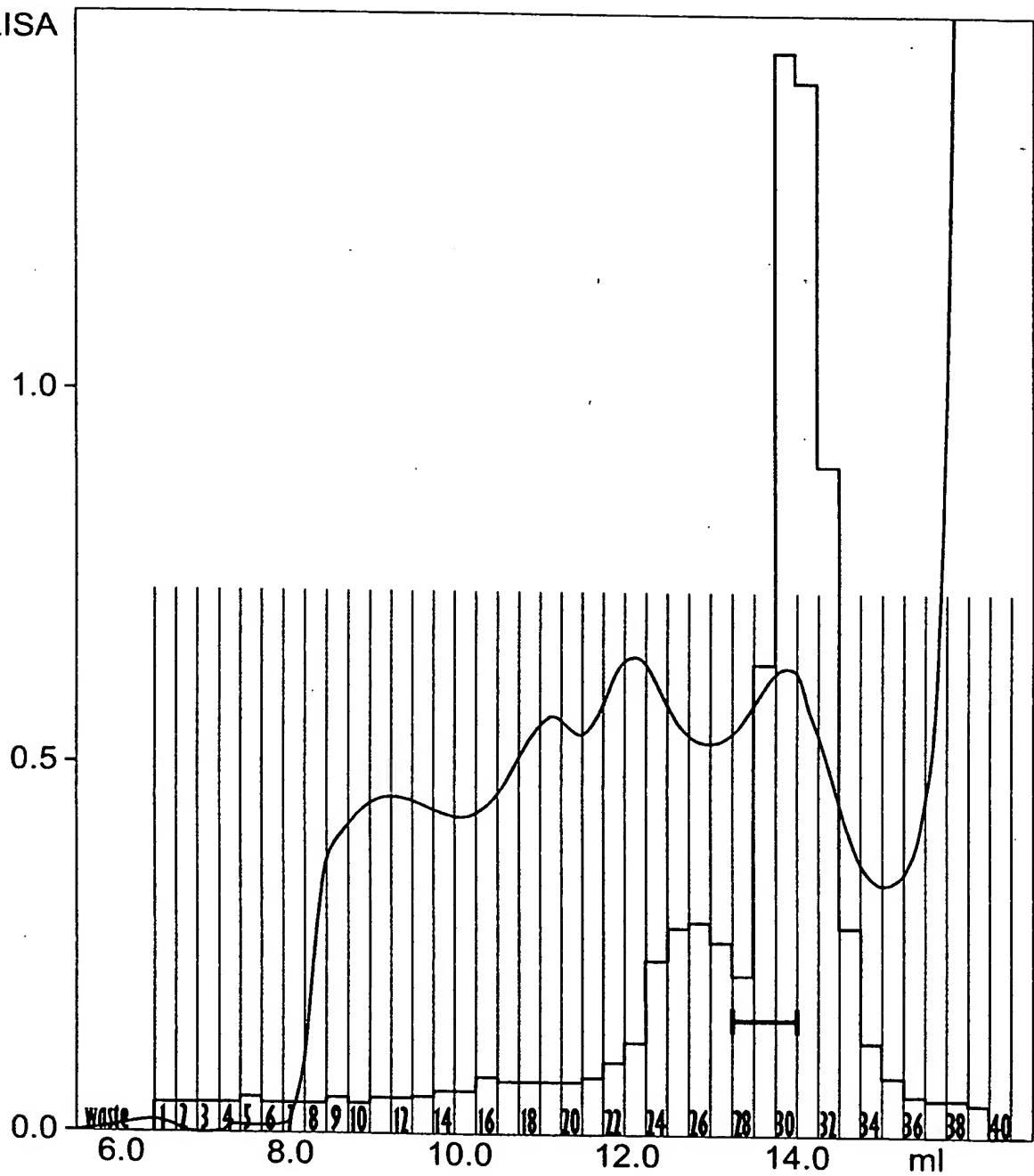


Figure 1A

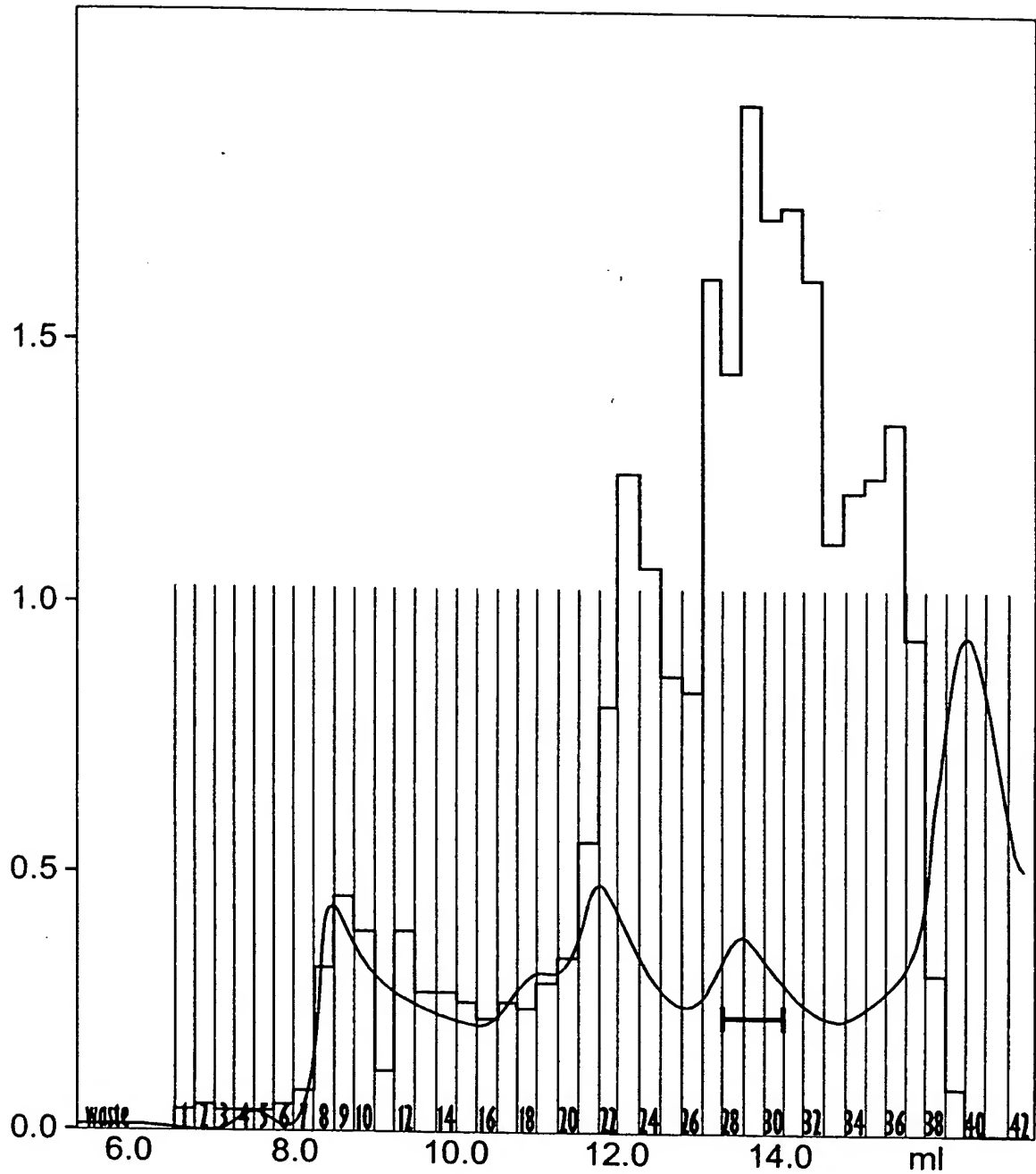


Figure 1B

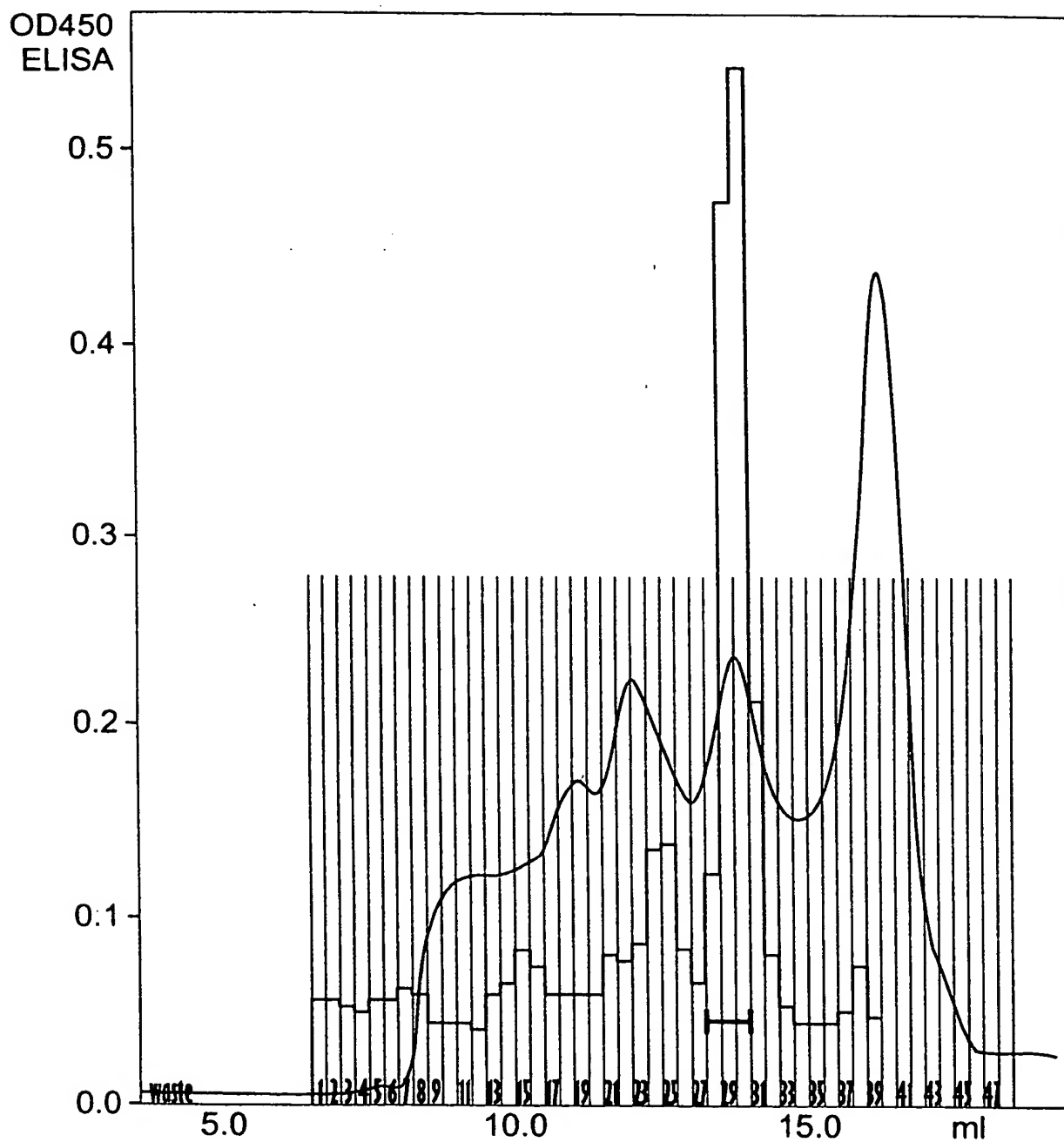


Figure 1C

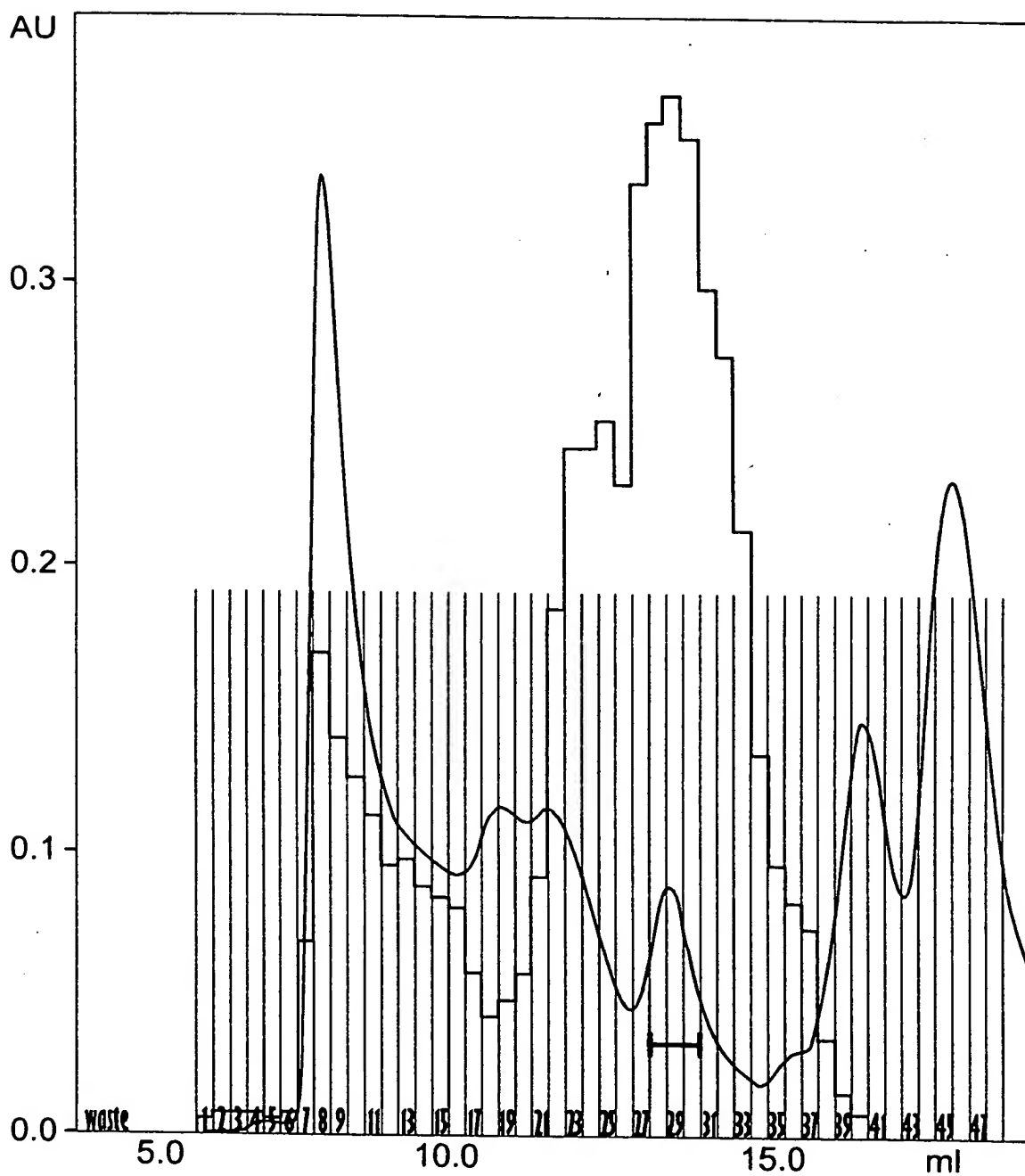


Figure 1D

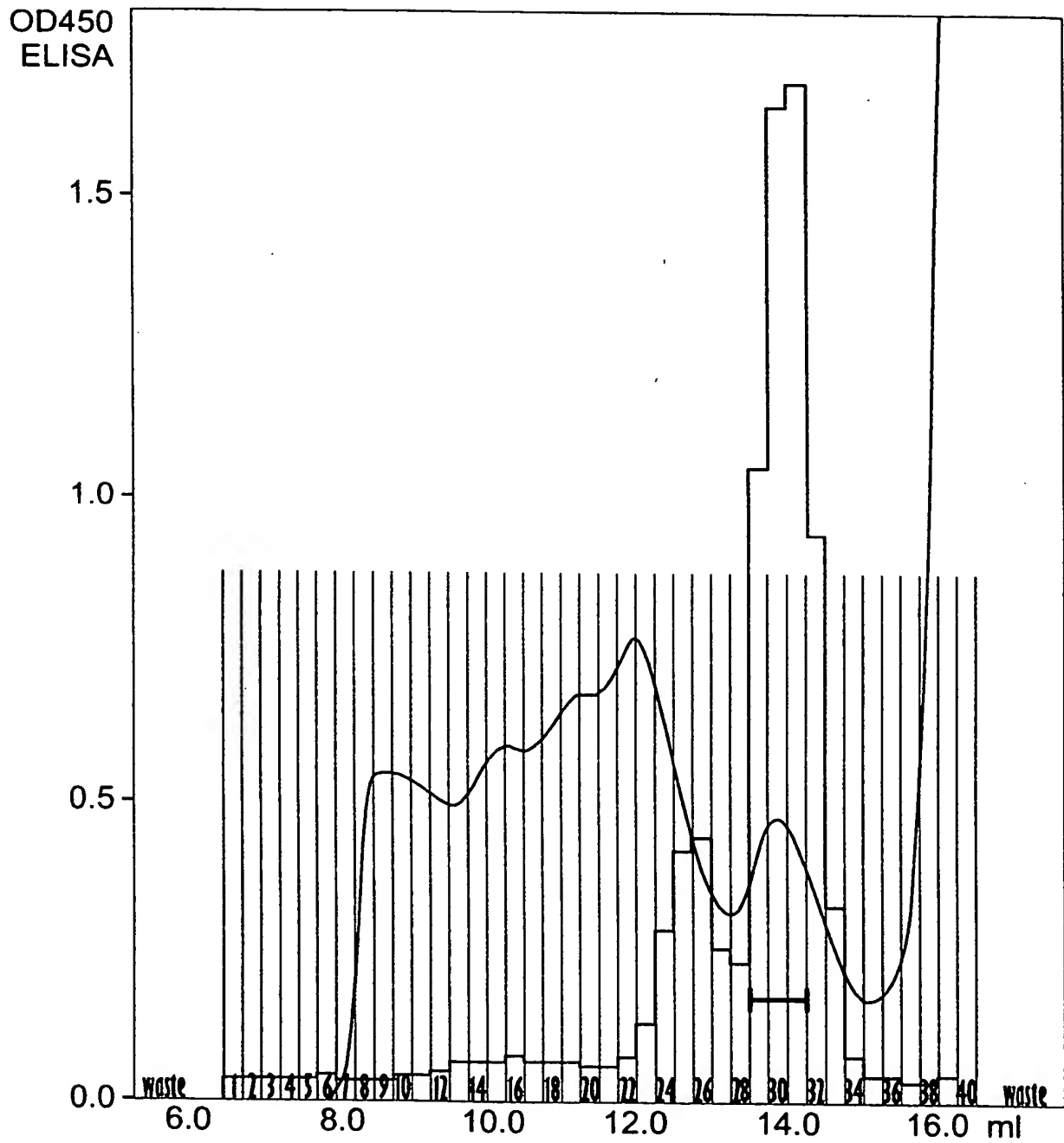


Figure 2A

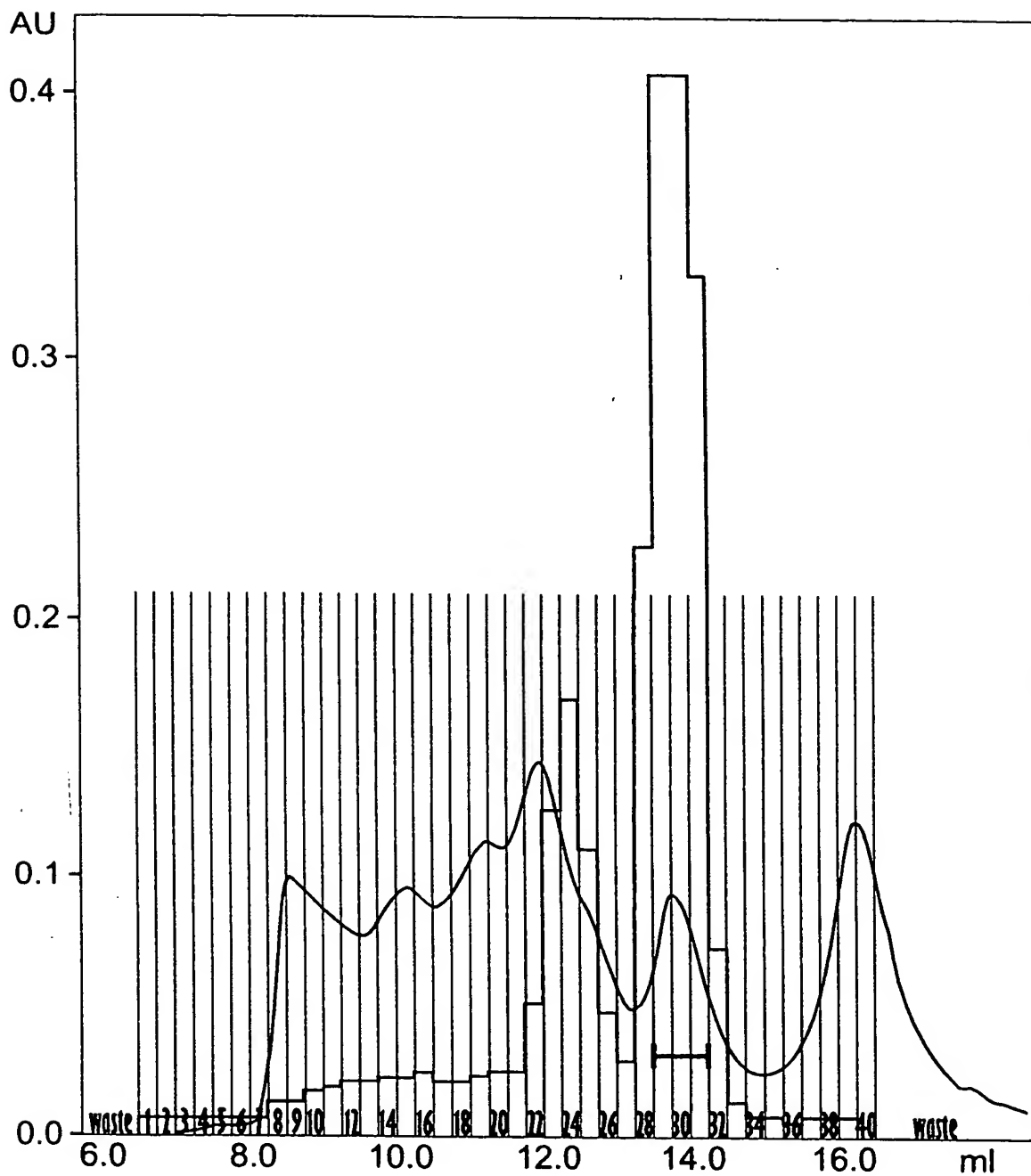


Figure 2B

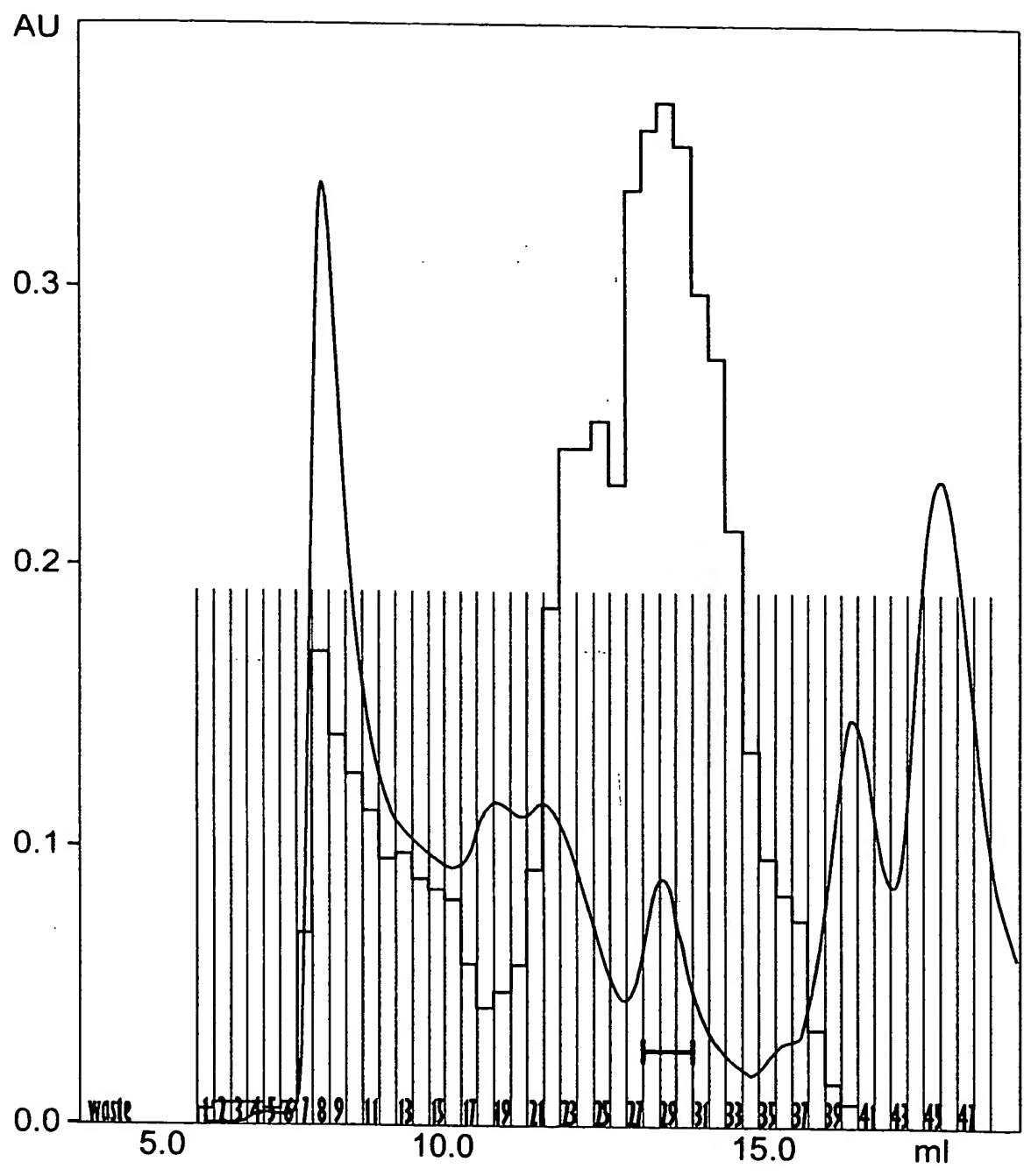


Figure 2C



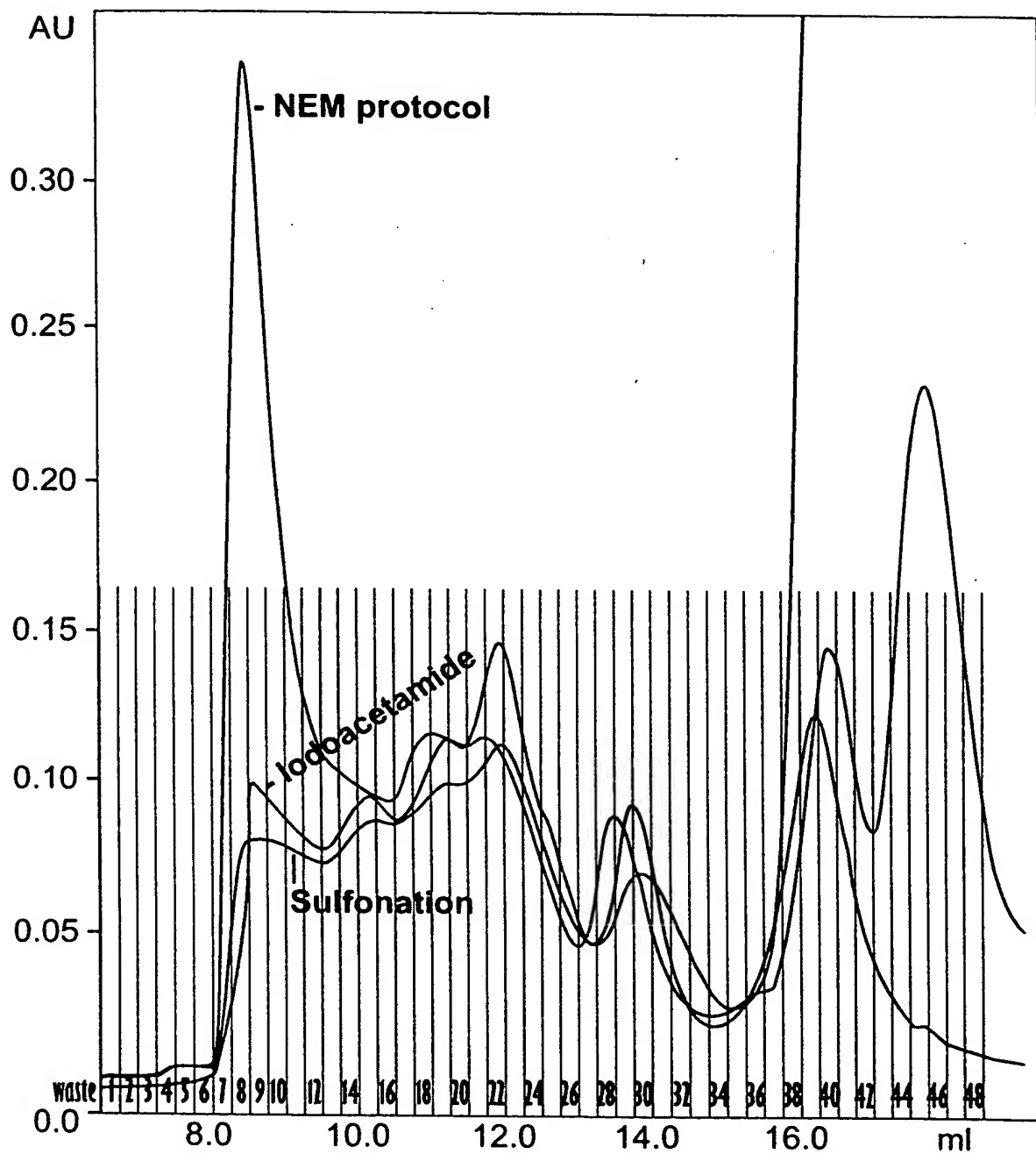


Figure 2D

# **SILVER STAINING: SCREENING FRACTIONS SEC 3% EMPIGEN**

Lane 1 and 10: Markers  
Lane 2 till 5: Lysis Ascorbate, DTT reduction without blocking  
Lane 6 till 9: Lysis Ascorbate, DTT reduction with sulfonation

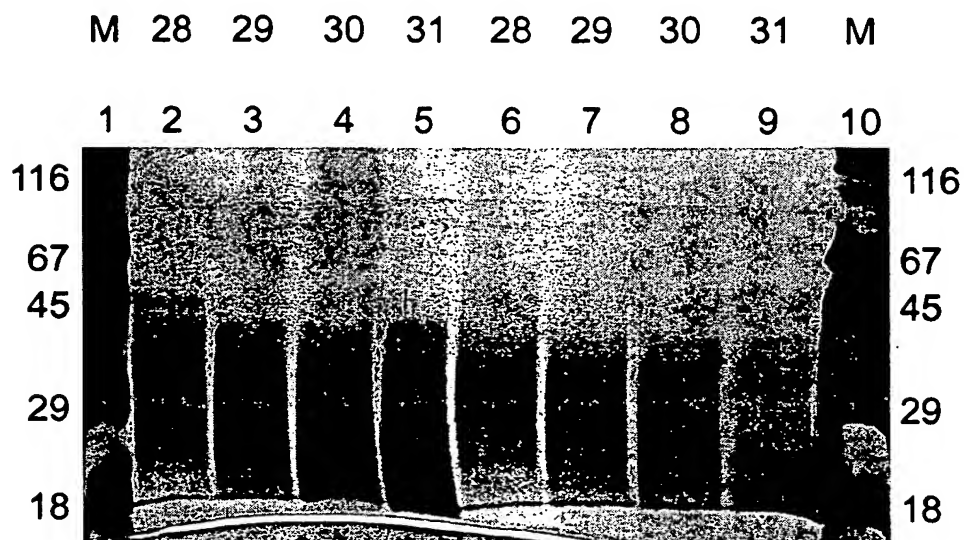


Figure 3a-1

# **MAB ANTI-E1 BLOT SCREENING FRACTIONS SEC 3% EMPIGEN**

Lane 1: Markers

Lane 2 till 5: Fractions SEC Lysis ascorbate, DTT reduction, ascorba

Detected with 11B7D8      M    28    29    30    31  
                                 1    2    3    4    5

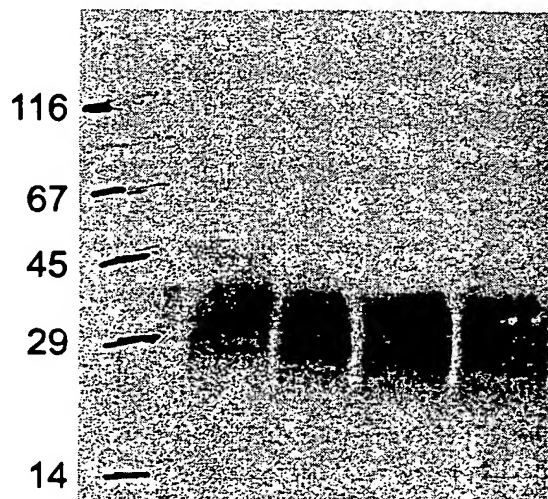
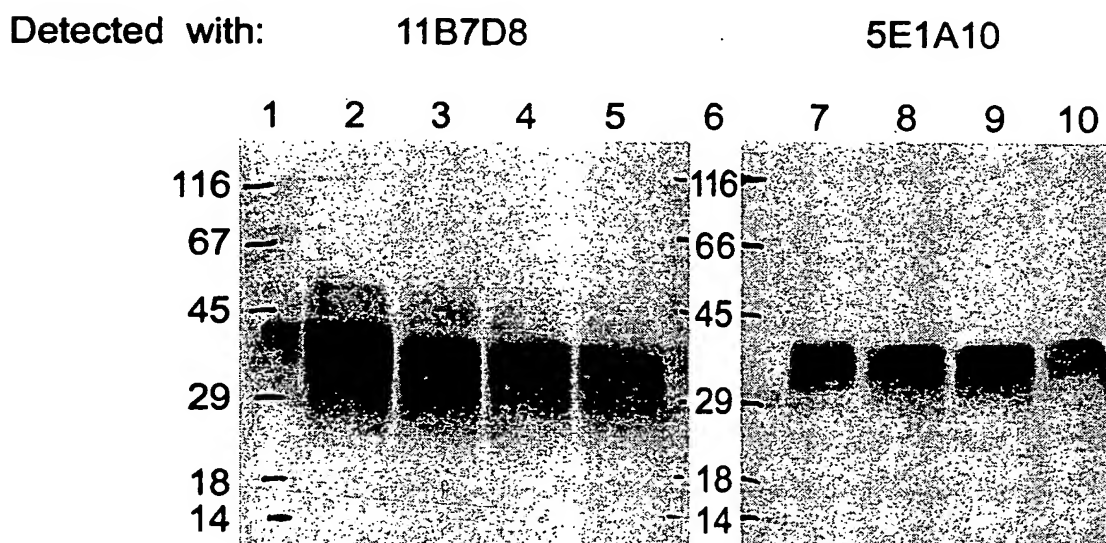


Figure 3a-2

## MAB ANTI E1 BLOT POOL SEC 3% EMPIGEN

Lane 1=6 Molecular weight markers  
Lane 2=7 Pool SEC NEM protocol  
Lane 3=8 Pool SEC IAA protocol  
Lane 4=9 Pool SEC Lysis sulfonation, DTT reduction + sulfonation  
Lane 5=10 Pool SEC Lysis ascorbate, DTT reduction + sulfonation



MAB 11B7D8: B epitope (amino terminale)  
MAB 5E1A10: A epitope (carboxy terminale)

Legend lanes:

NEM protocol: lysis in presence of NEM, DTT reduction and alkylation with NEM  
IAA protocol: lysis in presence of IAA, DTT reduction and alkylation with IAA  
 $\text{SO}_3 + \text{SO}_3$ : sulfonation after lysis, DTT reduction and sulfonation  
ASC +  $\text{SO}_3$ : lysis in presence of Lascorbate, DTT reduction and sulfonation

Figure 3b

*Purification of mTNF (His)<sub>6</sub> NS3 B9*

Cell lysis in 6M Gu.HCl

Sulfonation

IMAC on Ni-IDA

Pure NS3-SO<sub>3</sub><sup>-</sup>

Treatment with 200 mM DTT

Desalt at pH 4

Dilute till 500 µg/mL

Store at - 70° (+/- AO)

ELISA: Dilute --> 0.5 µg/mL

(+/- AO)

Figure 4

| ANTIOXIDANT GROUP I |          |                            |          |       |       |       |
|---------------------|----------|----------------------------|----------|-------|-------|-------|
| ANTIOXIDANT         |          | SAMPLE DIL.<br>DTT (10 mM) | SERUM N° |       |       |       |
| - 70°               | Dilution |                            | 17790    | 17832 | 17826 | 17838 |
| -                   | +        | -                          | 38       | 79    | 1067  | 1138  |
| -                   | +        | +                          | 1675     | 2134  | 2187  | 2190  |
| +                   | +        | -                          | 43       | 59    | 1051  | 1059  |
| +                   | +        | +                          | 1938     | 2175  | 1986  | 2155  |

| ANTIOXIDANT GROUP II |          |                            |          |       |       |       |
|----------------------|----------|----------------------------|----------|-------|-------|-------|
| ANTIOXIDANT          |          | SAMPLE DIL.<br>DTT (10 mM) | SERUM N° |       |       |       |
| - 70°                | Dilution |                            | 17790    | 17832 | 17826 | 17838 |
| -                    | +        | -                          | 150      | 277   | 1739  | 2152  |
| -                    | +        | +                          | 2064     | 2444  | 2474  | 2456  |
| +                    | +        | -                          | 116      | 229   | 1564  | 1854  |
| +                    | +        | +                          | 2095     | 2420  | 2509  | 2321  |

| CONTROL             | SERUM N° |       |       |       |
|---------------------|----------|-------|-------|-------|
|                     | 17790    | 17832 | 17826 | 17838 |
| NS3 B9 + 200 Mm DTT | 938      | 1793  | 1802  | 1996  |
| NS3 B9 + 10 Mm DTT  | 74       | 104   | 1874  | 2075  |

Figure 5a

*Thiol Compounds and NS3B9 reactivity*

| Antioxidant      |                                    | Reactivity of Serum N <sup>o</sup> (*) |       |       |       |
|------------------|------------------------------------|--|-------|-------|-------|
| Cone<br>(-70°,   | (mM)<br>Dilution)                  | 17780                                  | 17790 | 17832 | 17801 |
| -70°<br>Dilution | AO I + 1 mM GSH                    | 353                                    | 1160  | 2026  | 1988  |
| -70°<br>Dilution | AO I + 5 mM GSH                    | 287                                    | 1087  | 1816  | 1850  |
| -70°<br>Dilution | AO I + 1 mM GSH<br>AO I + 1 mM GSH | 525                                    | 1384  | 2137  | 2194  |
| -70°<br>Dilution | AO I + 1 mM Cys                    | 287                                    | 935   | 1679  | 1712  |
| -70°<br>Dilution | AO I + 5 mM Cys                    | 299                                    | 1160  | 1757  | 1764  |
| -70°<br>Dilution | AO II<br>AO II                     | 603                                    | 1763  | 2396  | 2183  |
| -70°<br>Dilution | 4 mM DTC                           | 453                                    | 1389  | 2060  | 1963  |
| -70°<br>Dilution | 4 mM Mono-SH                       | 130                                    | 649   | 1396  | 1541  |

(\*): Sample diluent in 3 mM DTT

AO I: 1 mM EDTA, 1 mM ascorbate

AO II: 2mM Mono-SH + 2 mM DTC

2 mM Mono-SH = 1mM TPCB + 1 mM TEG

2 mM DTC = 1mM DETC+ 1mM PDTC

GSH, Cys are reduced glutathion and cystein respectively

Figure 5b

**NS3B9 B960925II**

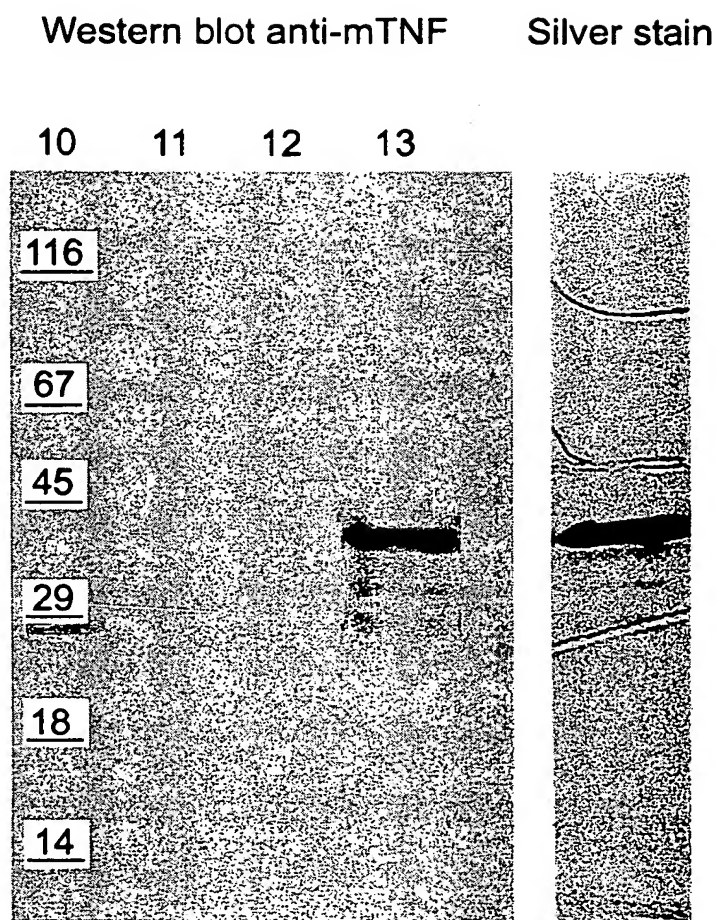


Figure 6a



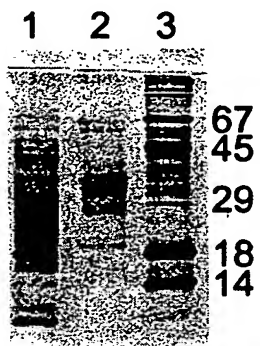
## HIS-tagged E1 purified from *Saccharomyces cerevisiae*

Lane 1: E1 from *S. cerevisiae*

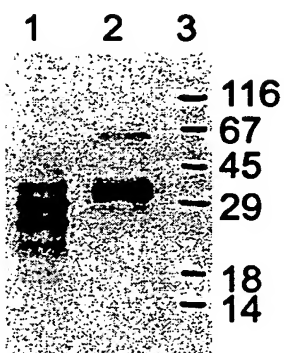
Lane 2: E1 from mammalian cells (vaccinia expression system)

Lane 3: marker proteins ( $M_r$  indicated in kDa)

### A) Silver staining



### B) anti-E1-blotting



### C) GNA-blotting

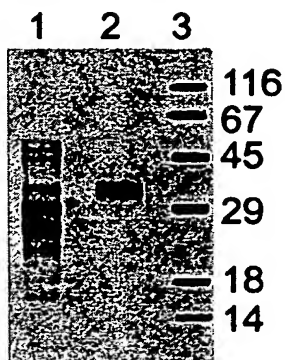


Figure 6b